#### **CHAPTER 2**

# II. VARIATION IN LOCAL PUBLIC HEALTH AGENCY WORKFORCE BY SIZE OF POPULATION SERVED - 2003

Forty-eight percent (48%) of Missouri's local public health agency workforce is employed in the 13 public health jurisdictions that serve populations greater than 80,000. The largest agencies are most likely to employ staff in full-time positions. Ten percent (10%) of the largest agencies' staff works part time while 33% of the staff in the smallest agencies is employed part time. (See Graph 7.1 and Data Table 7.1)

## BENEFITS FOR LOCAL PUBLIC HEALTH WORKFORCE

Most agencies (84% of smallest to 100% of largest), regardless of the size of populations they serve, contribute to health insurance benefits for staff. However, of agencies serving populations greater than 80,000, 85% also contribute to dental insurance coverage, but only 21% of agencies serving populations 20,000 or fewer are able to do so. Contribution toward life insurance and retirement programs are supported by 92% of the largest agencies. The proportion of other groups of agencies that contribute for these two benefits ranges from 60% to 83%. (See Graph 7.3 & 7.4 and Data Tables 7.3 & 7.4)

## PROFESSIONAL DEVELOPMENT

Eighty-seven percent (87%) of staff working in agencies serving populations of 40,000 or fewer participated in a professional development activity in the past twelve months. In agencies serving populations greater than 80,000, only 52% did so. (See Graph 7.5 and Data Table 7.5)

#### **ADMINISTRATORS**

The percentage of time spent on administrative activities increases in agencies serving larger populations. Eleven of the 13 administrators (93%) in the largest agencies spend at least 75% of their time on administration. Eighty-seven percent (87%) of administrators in agencies serving populations from 40,001 to 80,000, 80% of administrators in agencies serving populations from 20,001 to 40,000, and 66% of administrators in agencies serving populations 20,000 or fewer spend 75% or more of their time on administration. (See Graph 7.6.1 and Data Table 7.6.1)

Educational levels of administrators are highest in the largest agencies. Eighty-five percent (85%) of administrators in agencies serving populations over 80,000 have a master's or doctorate degree. The percentage of administrators with a bachelor's degree or above decreases from 100% in agencies serving populations greater than 80,000, and 80% in agencies serving populations from 40,001 to 80,000, down to 37% in agencies serving populations 20,000 or fewer. (See Graph 7.6.2 and Data Table 7.6.2)

A majority (63%) of administrators in agencies serving populations from 20,001 to 40,000 have been in their position 6 years or more. Conversely, administrators in the largest agencies are predominantly newer; 69% have spent 5 years or less in their position. (See Graph 7.6.3 and Data Table 7.6.3)

Annual salary earned by an administrator increases with the size of population served by the agency. A majority (62%) of administrators in agencies serving populations greater than 80,000, earn an annual salary of \$75,000 or more. In agencies that serve populations from 40,001 to 80,000, the largest category (47%) earn from \$55,000 to \$74,999. Forty-three percent (43%) of administrators in agencies serving populations from 20,001 to 40,000 earn between \$40,000 and \$54,999. A majority (55%) of administrators in agencies that serve populations of 20,000 or fewer earn between \$30,000 and \$39,000. (See Graph 7.6.5 and Data Table 7.6.5).

#### **NURSES**

Registered nurses (RNs) make up about 28% of the workforce in agencies within the 3 groups that serve smaller sizes of population, but in those that serve populations greater than 80,000, RNs represent only 17% of the workforce. The largest agencies are more likely to employ RNs with a bachelor's or master's degree; 32% of their full time, and 84% of part-time RNs have such degrees. The percentage of all RNs with bachelor's or master's degrees working in agencies serving other population sizes ranges from 23% to 28%. However, just as in the largest agencies, in those serving populations of 20,000 or fewer, and in those serving populations from 20,001 to 40,000, part-time RNs are more likely to have degrees than full-time staff. (See Graphs 7.7.1 & 7.7.2 and Data Tables 7.7.1 & 7.7.2)

There are 22 RNs working in local public health agencies that are certified by American Nurses Credential Center (ANCC) as Community Health Nurses. Nine of them work in agencies serving populations of 20,000 or fewer, and 10 work in agencies that serve populations greater than 80,000. In agencies serving populations between 40,001 and 80,000, 24% of RNs without a bachelor's or master's degree have completed a baccalaureate course in principles of community/public health nursing; only 8% of RNs without a degree in the largest agencies have done so. Twelve to fourteen percent (12%-14%) of RNs without a degree in the other groups of agencies have completed the course. Fifty-two percent (52%) of RNs working in agencies that serve populations greater than 80,000 reportedly are practicing population-based public health nursing compared to 77% or more of RNs working in each of the other groups of agencies. (See Graphs 7.7.3 thru 7.7.6 and Data Tables 7.7.3 thru 7.7.6)

Sixty-three percent (63%) of agencies that serve populations of 20,000 or fewer pay their full-time registered nurses an average annual salary of \$30,000 or more, compared to 100% of agencies that serve populations greater than 80,000. The majority of agencies (75%) that serve populations greater than 80,000 also pay full-time Licensed Practical Nurses (LPNs) an annual average salary within this same range, however, the majority of agencies (78% or more) in other groups pay LPNs in a lower range between \$20,000 and \$29,999. LPNs represent 7% of the workforce in the smallest agencies, but only 1% of the workforce in the largest agencies. (See Graphs 7.7.7 thru 7.8.2 and Data Tables 7.7.7 thru 7.8.2)

# **ENVIRONMENTAL SPECIALISTS**

Most agencies (58%) serving populations of 20,000 or fewer employ environmental specialists part time; in agencies serving populations greater than 80,000, only 3% of environmental specialists work part time. Ninety-four percent (94%) of environmental specialists working in agencies that serve populations between 40,001 and 80,000 have a baccalaureate degree or above, but only 49% of those working in the largest agencies do. Seventy-three percent (73%) of the largest agencies pay full-time environmental specialists an average annual salary in the range between \$30,000 and \$39,999, and the remainder of agencies in this group

pay in a higher range from \$40,000 to \$54,999. Half (50%) of agencies serving populations of 20,000 or fewer also pay full-time environmental specialists in the range between \$30,000 \$39,999, however the remainder of agencies in this group pay in a lower range between \$20,000 and \$29,999. (See Graphs 7.9.1 thru 7.9.3 and Data Tables 7.9.1 thru 7.9.3)

Forty-six percent (46%) of environmental specialists working in agencies that serve populations between 20,001 and 40,000 are state certified, compared to only 10% of those working in the largest agencies. However, an additional 10% of environmental specialists working in the largest agencies are nationally registered. Ten percent (10%) of those working in agencies that serve populations between 20,001 and 40,000 have national registration as well, but only 3% of environmental specialists in agencies that serve populations between 40,001 and 80,000 are registered. (See Graph 7.9.4 and Data Tables 7.9.4.1 & 7.9.4.2)

## **NUTRITIONISTS**

Agencies serving populations of 20,000 or fewer are most likely to hire nutritionists as part-time staff. Seventy-eight percent (78%) of nutritionists in agencies serving populations of 20,000 or fewer work part time compared to only 4% in agencies serving populations greater than 80,000. Eighty percent (80%) of full-time nutritionists in the largest agencies earn an annual salary of \$30,000 or more, while 67% of those working in agencies serving populations from 40,001 to 80,000 earn in a lower range between \$20,000 and \$29,999. (See Graphs 7.10.1 & 7.10.3 and Data Tables 7.10.1 & 7.10.3)

#### **DIETICIANS**

Eighty percent (80%) of dieticians working in the largest agencies work in full time positions. Half (50%) of those working in agencies serving populations between 20,001 and 40,000 and only 33% of those working in agencies that serve populations up to 20,000 work full time. All dieticians in both groups of agencies that serve populations between 20,001 and 80,000 have a bachelor's degree. Forty percent (40%) of those working in the largest agencies and 33% of those working in the smallest agencies also have master's degrees. All of the smallest agencies, and all agencies that serve populations between 40,001 and 80,000 pay full time dieticians an average annual salary in the range between \$30,000 and \$39,999. Sixty-seven percent (67%) of agencies that serve populations between 20,001 and 40,000 pay an average annual salary in a lower range between \$20,000 and \$29,999. (See Graphs 7.11.1, 7.11.2, & 7.11.3)

#### **HEALTH EDUCATORS**

Seventy-seven percent (77%) of the largest agencies have health educators; however, only 27% of agencies that serve populations from 40,001 to 80,000 have a health educator on staff. Ninety-two percent (92%) of health educators in the largest agencies work full time, compared to the smallest agencies where only 38% are full time. All of the largest agencies pay full-time health educators an average annual salary over \$30,000, but 80% of agencies serving populations from 20,001 to 40,000, and 67% of agencies serving populations of 20,000 or fewer and those serving populations from 40,001 to 80,000 pay full-time health educators in a lower range between \$20,000 and \$29,000. Two-thirds (66%) of the 12 health educators that are Certified Health Education Specialists work in the largest agencies and 25% of them work in the smallest agencies. (See Graphs 7.12.1 thru 7.12.4 and Data Tables 7.12.1 thru 7.12.4)

#### SOCIAL WORKERS

Thirty-eight percent (38%) of agencies that serve populations greater than 80,000 hire social workers, but only 11% of the smallest agencies have them. All agencies in the two groups that serve smaller population sizes pay full-time social workers an average annual salary of \$30,000-\$39,999. Seventy-five percent (75%) of largest agencies also pay full-time social workers within this range, however agencies serving populations from 40,001 to 80,000 are most likely (75%) to pay in the lower range between \$20,000 and \$29,999. Seventy-four percent (74%) of social workers in the largest agencies are licensed, while none in the smallest agencies are. (See Graphs 7.13.1 thru 7.13.4 and Data Tables 7.13.1 thru 7.13.4)

## SUPPORT STAFF

Ninety-two percent (92%) of the largest agencies pay full-time clerical staff an average annual salary in the range between \$20,000 and \$29,999 while only half (50%) of the smallest agencies pay within this range. The remainder of the smallest agencies pays average annual salary of less than \$20,000. (See Graph 7.14.3 and Data Table 7.14.3)

## **EPIDEMIOLOGY SPECIALISTS**

Epidemiology specialists are on staff in all agencies serving populations greater than 80,000. Only 4% of the smallest agencies have epidemiology specialists; 27% of the other two groups of agencies have them. All agencies that serve populations under 40,000 pay their full-time epidemiology specialists an average annual salary in the range between \$30,000 and \$39,999. Half (50%) of agencies serving larger populations pay an average annual salary of \$40,000 or more. (See Graphs 7.15.1 & 7.15.3 and Data Tables 7.15.1 & 7.15.3)

## EMERGENCY RESPONSE PLANNERS

Emergency response planners are on staff in all agencies serving populations greater than 80,000. Nine percent (9%) of the smallest agencies have planners, as do 27% of agencies serving populations from 20,001 and 40,000 and 53% of agencies serving populations from 40,001 to 80,000. Eighty-four percent (84%) of the largest agencies pay their full-time planners an average annual salary over \$40,000, however, half or more of agencies serving smaller populations pay planners in a lower range. (See Graphs 7.16.1 & 7.16.3 and Data Tables 7.16.1 & 7.16.3)

#### **PHYSICIANS**

Only two full time physicians work in public health agencies. Both of the full time and 1 part time physician are work in agencies serving populations greater than 80,000. The remaining ten part time physicians are evenly distributed among the other sizes of agencies, which are more likely to have physicians on retainer, or to rely on volunteers. (See Graph 7.17.1 and Data Table 7.17.1.1)

#### **DENTISTS**

Only 5 agencies employ the 5 full time and 2 part time dentists working in local public health. Four of the 5 full-time and 1 of the part-time dentists work in agencies that serve populations greater than 80,000. (See Graph 7.17.2 and Data Table 7.17.2.1)

## OTHER LOCAL PUBLIC HEALTH AGENCY STAFF

Agencies serving populations greater than 80,000 reportedly have up to 37% of their workforce filling positions other than those described above compared to agencies serving populations from 40,001 to 80,000 where only 6% of staff fill other kinds of positions. Seventy

percent (70%) of the 805 staff reported in the "other" category work in the largest agencies. (See Graph 1.18.1 & Data Table 7.18.1.1)